

What is claimed is:

1. A cargo lamp assembly for vehicles, the assembly comprising:

a white light emitting diode (LED) having an aperture for emitting a light beam in an arc of about 120° in horizontal and vertical planes; and

a lens for receiving the beam and reducing the beam in a horizontal plane to about 60° and reducing the beam in a vertical plane to about 60°.

2. The cargo lamp assembly in accordance with claim 1 wherein the LED aperture includes a horizontal aperture component adapted for emitting the light beam extending 60° to the left and 60° to the right of a beam axis in the horizontal plane and a vertical aperture component for emitting the light beam extending 60° above the beam axis and 60° below the beam axis in the vertical plane; and

wherein said lens is adapted to configure the light beam to an upper boundary in the vertical plane deflected about 10° downwardly relative to the horizontal plane and a lower boundary in the vertical plane extending downwardly about 70° relative to the horizontal plane.

3. The cargo lamp in accordance with claim 2 wherein said LED is disposed about halfway between said lens in the horizontal plane and a focal point of said lens.
4. The cargo lamp in accordance with claim 2 wherein said LED is disposed at about a focal point of said lens in the vertical plane.
5. The cargo lamp in accordance with claim 3 wherein said LED is disposed at about a focal point of said lens in the vertical plane.
6. The cargo lamp in accordance with claim 2 wherein said lens is a clear lens.
7. The cargo lamp in accordance with claim 6 wherein said LED is at least an 18 lumen LED and said lens emits at least about 10 candela.
8. A cargo lamp assembly for vehicles, the assembly comprising:
  - a white light emitting diode (LED) having an aperture for emitting a light beam in an arc of  $x^\circ$  to the left and  $x^\circ$  to the right of a central axis of the beam in a horizontal plane; and
  - a lens for reducing the beam to an arc of about  $1/2x^\circ$  to the left and about  $1/2x^\circ$  to the right of the central axis,

said lens being configured in horizontal cross section to provide a lens focal point about twice the distance from said lens as the distance of the LED from said lens.

9. A cargo lamp assembly for vehicles, the assembly comprising:

a white light emitting diode (LED) having an aperture for emitting a light beam in an arc of  $y^\circ$  above and  $y^\circ$  below a central axis of the beam in a vertical plane; and

a lens for reducing the beam to an arc including in the vertical plane an upper boundary deflected downwardly about  $10^\circ$  relative to a horizontal plane, and a lower boundary of about  $1/2y^\circ + 10^\circ$ , said lens being configured in vertical cross section to provide a lens focal point coincident with the distance from said lens to said LED.

10. The cargo lamp assembly for vehicles, in accordance with claim 8 wherein the said white LED aperture emits the light beam in an arc of  $y^\circ$  above and  $y^\circ$  below a central axis of the beam in a vertical plane; and

said lens reduces the beam to an arc including in the vertical plane an upper boundary deflected downwardly about  $10^\circ$  relative to a horizontal plane, and a lower

boundary of about  $1/2y^\circ + 10^\circ$ , said lens being  
configured in vertical cross section to provide a lens  
focal point coincident with the distance from said  
lens to said LED.